BRUHAT BENGALURU MAHANAGARA PALIKE

Yelahanka Division

# DETAILED MEASUREMENTS

EMB

## Name of the Package:

Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO-12)

Agency: Sri. Srinivasa Reddy H

PMC: Sapience Consultants and Engineers

A.E: Sri. Ramakrishnaiah

A.E.E.: Sri. Sachin

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

## FIFTH and PART

| | |
|---|---|
| Item No: | 1 |
| Item Name: | KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embarnkemnt location to a lead of 1.00 km and complete as per specifications MORTH Specification No.301 ( I No-19.14,P No-143) |

**Final Measurement Date(s) : 14/07/2022**

| Chainage / Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **Earth work for road** | | | | | | | | | |
| **Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main** | | | | | | | | | |
| 0.00 | 7.00 | | | | | | | | Approach |
| 7.00 | 30.00 | 1 | 23.00 | 0.90 | | 0.90 | 0.20 | 4.14 | |
| 30.00 | 60.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 60.00 | 90.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 90.00 | 120.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 120.00 | 150.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 150.00 | 180.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 180.00 | 210.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 210.00 | 240.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 240.00 | 270.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 270.00 | 300.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 300.00 | 330.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 330.00 | 360.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 360.00 | 390.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 390.00 | 420.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 420.00 | 450.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 450.00 | 480.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 480.00 | 510.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 510.00 | 540.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 540.00 | 570.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 570.00 | 600.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 600.00 | 630.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 630.00 | 660.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |

AE

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

| Chainage Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 660.00 | 690.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 690.00 | 720.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 720.00 | 750.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 750.00 | 780.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 780.00 | 810.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 810.00 | 840.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 840.00 | 870.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 870.00 | 900.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 900.00 | 930.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 930.00 | 960.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 960.00 | 990.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 990.00 | 1020.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 1020.00 | 1050.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 1050.00 | 1080.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 1080.00 | 1110.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| | | | | | | | Total Qty | 198.54 | |
| | | | | | | | Total BOQ Quantity | 5008.80 | |
| | | | | | | | Quantity Paid up to FOURTH Part Bill | 5008.80 | |
| | | | | | | | Quantity Reserved for Approval of Workslip and EIRL | 198.54 | |
| | | | | | | | Qty Payable in this Bill | 0.00 | CUM |

Contractor Representative

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

## FIFTH and PART

| | |
|---|---|
| Item No: | 15 |
| Item Name: | KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications (P.No.-155,I.No.-20.18) |

**Final Measurement Date(s) : 18/07/2022**

| Chainage Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| wet mix macadam | | | | | | | | | |
| **Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main** | | | | | | | | | |
| 0.00 | 7.00 | | | | | | | | Approach |
| 7.00 | 30.00 | 1 | 23.00 | 0.90 | | 0.90 | 0.20 | 4.14 | |
| 30.00 | 60.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 60.00 | 90.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 90.00 | 120.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 120.00 | 150.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 150.00 | 180.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 180.00 | 210.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 210.00 | 240.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 240.00 | 270.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 270.00 | 300.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 300.00 | 330.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 330.00 | 360.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 360.00 | 390.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 390.00 | 420.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 420.00 | 450.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 450.00 | 480.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 480.00 | 510.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 510.00 | 540.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 540.00 | 570.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 570.00 | 600.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 600.00 | 630.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |

AE

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

| Chainage Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 630.00 | 660.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 660.00 | 690.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 690.00 | 720.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 720.00 | 750.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 750.00 | 780.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 780.00 | 810.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 810.00 | 840.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 840.00 | 870.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 870.00 | 900.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 900.00 | 930.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 930.00 | 960.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 960.00 | 990.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 990.00 | 1020.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 1020.00 | 1050.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 1050.00 | 1080.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| 1080.00 | 1110.00 | 1 | 30.00 | 0.90 | | 0.90 | 0.20 | 5.40 | |
| | | | | | | | Total Qty | 198.54 | |
| | | | | | | | Qty Payable in this Bill | 198.54 | CUM |

Contractor Representative

SAPTHAGIRI CONSULTANTS & ENGINEERS Bangalore-59

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

### FIFTH and PART

| | |
|---|---|
| Item No: | 16 |
| Item Name: | KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and sparying primer at the rte of 0.60 kg /sqm using mechanical means complete as per specifications .Clause 502 of MoRTH V th Revision ( pg No.158 I.No-21.6), Issue Rate |

**Final Measurement Date(s) : 20/07/2022;**

| Chainage Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **Prime coat** | | | | | | | | | |
| **Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main** | | | | | | | | | |
| 0.00 | 7.00 | | | | | | | | Approach |
| 7.00 | 30.00 | 1 | 23.00 | 0.90 | | 0.90 | | 20.70 | |
| 30.00 | 60.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 60.00 | 90.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 90.00 | 120.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 120.00 | 150.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 150.00 | 180.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 180.00 | 210.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 210.00 | 240.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 240.00 | 270.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 270.00 | 300.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 300.00 | 330.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 330.00 | 360.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 360.00 | 390.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 390.00 | 420.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 420.00 | 450.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 450.00 | 480.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 480.00 | 510.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 510.00 | 540.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 540.00 | 570.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 570.00 | 600.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 600.00 | 630.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 630.00 | 660.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 660.00 | 690.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |

SCIENCE CONSULTANTS & ENGINEERS ★ Bangalore-59

| Chainage Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 690.00 | 720.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 720.00 | 750.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 750.00 | 780.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 780.00 | 810.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 810.00 | 840.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 840.00 | 870.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 870.00 | 900.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 900.00 | 930.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 930.00 | 960.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 960.00 | 990.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 990.00 | 1020.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 1020.00 | 1050.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 1050.00 | 1080.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| 1080.00 | 1110.00 | 1 | 30.00 | 0.90 | | 0.90 | | 27.00 | |
| | | | | | | | Total Qty | 992.70 | |
| | | | | | | | Qty Payable in this Bill | 992.70 | SQM |

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

NAME OF
Nagarjuna
Areas in Wa

Item No:

Item Name:

Final Measure
Chaina
Land M
Cleaning
Self Financed Sc

| |
|---|
| 0.00 |
| 7.00 |
| 30.00 |
| 60.00 |
| 90.00 |
| 120.00 |
| 150.00 |
| 180.00 |
| 210.00 |
| 240.00 |
| 270.00 |
| 300.00 |
| 330.00 |
| 360.00 |
| 390.00 |
| 420.00 |
| 450.00 |
| 480.00 |
| 510.00 |
| 540.00 |
| 570.00 |
| 600.00 |
| 630.00 |
| 660.00 |
| 690.00 |
| 720.00 |
| 750.00 |

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

## FIFTH and PART

| | |
|---|---|
| Item No: | EIRL |
| Item Name: | Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and/ or compressed air to receive the bitumenous treatment including cost of all materials,labour, HOM of machinaries complete as per specifications. MORTH specification Clause 501 |

**Final Measurement Date(s) : 22/07/2022;**

| Chainage Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Cleaning | | | | | | | | | |
| Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main | | | | | | | | | |
| 0.00 | 7.00 | 1 | 7.00 | 17.30 | 10.70 | 14.00 | | 98.00 | |
| 7.00 | 30.00 | 1 | 23.00 | 10.70 | 10.50 | 10.60 | | 243.80 | |
| 30.00 | 60.00 | 1 | 30.00 | 10.50 | 10.50 | 10.50 | | 315.00 | |
| 60.00 | 90.00 | 1 | 30.00 | 10.50 | 10.40 | 10.45 | | 313.50 | |
| 90.00 | 120.00 | 1 | 30.00 | 10.40 | 10.40 | 10.40 | | 312.00 | |
| 120.00 | 150.00 | 1 | 30.00 | 10.40 | 11.10 | 10.75 | | 322.50 | |
| 150.00 | 180.00 | 1 | 30.00 | 11.10 | 11.10 | 11.10 | | 333.00 | |
| 180.00 | 210.00 | 1 | 30.00 | 11.10 | 11.30 | 11.20 | | 336.00 | |
| 210.00 | 240.00 | 1 | 30.00 | 11.30 | 11.00 | 11.15 | | 334.50 | |
| 240.00 | 270.00 | 1 | 30.00 | 11.00 | 13.00 | 12.00 | | 360.00 | |
| 270.00 | 300.00 | 1 | 30.00 | 13.00 | 10.70 | 11.85 | | 355.50 | |
| 300.00 | 330.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | | 322.50 | |
| 330.00 | 360.00 | 1 | 30.00 | 10.80 | 10.30 | 10.55 | | 316.50 | |
| 360.00 | 390.00 | 1 | 30.00 | 10.30 | 10.80 | 10.55 | | 316.50 | |
| 390.00 | 420.00 | 1 | 30.00 | 10.80 | 10.80 | 10.80 | | 324.00 | |
| 420.00 | 450.00 | 1 | 30.00 | 10.80 | 10.90 | 10.85 | | 325.50 | |
| 450.00 | 480.00 | 1 | 30.00 | 10.90 | 10.60 | 10.75 | | 322.50 | |
| 480.00 | 510.00 | 1 | 30.00 | 10.60 | 10.80 | 10.70 | | 321.00 | |
| 510.00 | 540.00 | 1 | 30.00 | 10.80 | 9.70 | 10.25 | | 307.50 | |
| 540.00 | 570.00 | 1 | 30.00 | 10.60 | 11.60 | 11.10 | | 333.00 | |
| 570.00 | 600.00 | 1 | 30.00 | 11.60 | 11.00 | 11.30 | | 339.00 | |
| 600.00 | 630.00 | 1 | 30.00 | 11.00 | 10.80 | 10.90 | | 327.00 | |
| 630.00 | 660.00 | 1 | 30.00 | 10.80 | 10.70 | 10.75 | | 322.50 | |
| 660.00 | 690.00 | 1 | 30.00 | 10.70 | 11.00 | 10.85 | | 325.50 | |
| 690.00 | 720.00 | 1 | 30.00 | 11.00 | 10.70 | 10.85 | | 325.50 | |
| 720.00 | 750.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | | 322.50 | |
| 750.00 | 780.00 | 1 | 30.00 | 10.80 | 9.00 | 9.90 | | 297.00 | |

AE.

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

| Chainage | | Nos | L | B | B1 | Avg B | D | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Land Mark | | | (m) | (m) | (m) | (m) | (m) | | |
| 780.00 | 810.00 | 1 | 30.00 | 10.20 | 9.80 | 10.00 | | 300.00 | |
| 810.00 | 840.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | | 294.00 | |
| 840.00 | 870.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | | 294.00 | |
| 870.00 | 900.00 | 1 | 30.00 | 9.80 | 9.60 | 9.70 | | 291.00 | |
| 900.00 | 930.00 | 1 | 30.00 | 9.60 | 9.80 | 9.70 | | 291.00 | |
| 930.00 | 960.00 | 1 | 30.00 | 9.80 | 11.20 | 10.50 | | 315.00 | |
| 960.00 | 990.00 | 1 | 30.00 | 11.20 | 11.20 | 11.20 | | 336.00 | |
| 990.00 | 1020.00 | 1 | 30.00 | 11.20 | 13.20 | 12.20 | | 366.00 | |
| 1020.00 | 1050.00 | 1 | 30.00 | 13.20 | 13.50 | 13.35 | | 400.50 | |
| 1050.00 | 1080.00 | 1 | 30.00 | 13.50 | 13.30 | 13.40 | | 402.00 | |
| 1080.00 | 1110.00 | 1 | 30.00 | 13.30 | 14.00 | 13.65 | | 409.50 | |
| CONTINUITY ROAD | | | | | | | | | |
| 1110.00 | 1139.00 | 1 | 29.00 | 10.80 | 9.80 | 10.30 | | 298.70 | |
| DEDUCTION | | | | | | | | | |
| E POLE | | -6 | 0.30 | 0.30 | | 0.30 | | -0.54 | |
| RAMP | | -1 | 4.20 | 0.30 | | 0.30 | | -1.26 | |
| FOOTPATH | | -1 | 8.00 | 1.80 | | 1.80 | | -14.40 | |
| MANHOLE | | -19 | 0.64 | | | | | -12.08 | |
| RAMP | | -1 | 7.00 | 0.45 | | 0.45 | | -3.15 | |
| RAMP | | -1 | 5.20 | 0.60 | | 0.60 | | -3.12 | |
| FOOTPATH | | -1 | 14.00 | 2.00 | | 2.00 | | -28.00 | |
| TREE | | -1 | 2.00 | 2.00 | | 2.00 | | -4.00 | |
| RAMP | | -1 | 4.10 | 0.80 | | 0.80 | | -3.28 | |
| LAMP POST | | -1 | 0.60 | 0.60 | | 0.60 | | -0.36 | |
| RAMP | | -1 | 7.40 | 0.60 | | 0.60 | | -4.44 | |
| RAMP | | -1 | 8.60 | 2.60 | | 2.30 | | -19.78 | |
| Prime Coat Area | | -1 | | 992.70 | | | | -992.70 | |
| | | | | | | | Total Qty | 11382.39 | |
| | | | | | | | Total BOQ Quantity | 0.00 | |
| | | | | | | | Quantity Reserved for Approval of Workslip and EIRL | 11382.39 | |
| | | | | | | | Qty Payable in this Bill | 0.00 | SQM |

Contractor Representative

SCIENCE CONSULTANTS & ENGINEERS Bangalore-59

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

### FIFTH and PART

| | |
|---|---|
| Item No: | 17 |
| Item Name: | KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of materials , labour, HOM complete as per specification P.No.-158,I.No-21.7,Issue Rate |

**Final Measurement Date(s) : 22/07/2022;**

| Chainage Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Tack coat | | | | | | | | | |
| Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main | | | | | | | | | |
| 0.00 | 7.00 | 1 | 7.00 | 17.30 | 10.70 | 14.00 | | 98.00 | |
| 7.00 | 30.00 | 1 | 23.00 | 10.70 | 10.50 | 10.60 | | 243.80 | |
| 30.00 | 60.00 | 1 | 30.00 | 10.50 | 10.50 | 10.50 | | 315.00 | |
| 60.00 | 90.00 | 1 | 30.00 | 10.50 | 10.40 | 10.45 | | 313.50 | |
| 90.00 | 120.00 | 1 | 30.00 | 10.40 | 10.40 | 10.40 | | 312.00 | |
| 120.00 | 150.00 | 1 | 30.00 | 10.40 | 11.10 | 10.75 | | 322.50 | |
| 150.00 | 180.00 | 1 | 30.00 | 11.10 | 11.10 | 11.10 | | 333.00 | |
| 180.00 | 210.00 | 1 | 30.00 | 11.10 | 11.30 | 11.20 | | 336.00 | |
| 210.00 | 240.00 | 1 | 30.00 | 11.30 | 11.00 | 11.15 | | 334.50 | |
| 240.00 | 270.00 | 1 | 30.00 | 11.00 | 13.00 | 12.00 | | 360.00 | |
| 270.00 | 300.00 | 1 | 30.00 | 13.00 | 10.70 | 11.85 | | 355.50 | |
| 300.00 | 330.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | | 322.50 | |
| 330.00 | 360.00 | 1 | 30.00 | 10.80 | 10.30 | 10.55 | | 316.50 | |
| 360.00 | 390.00 | 1 | 30.00 | 10.30 | 10.80 | 10.55 | | 316.50 | |
| 390.00 | 420.00 | 1 | 30.00 | 10.80 | 10.80 | 10.80 | | 324.00 | |
| 420.00 | 450.00 | 1 | 30.00 | 10.80 | 10.90 | 10.85 | | 325.50 | |
| 450.00 | 480.00 | 1 | 30.00 | 10.90 | 10.60 | 10.75 | | 322.50 | |
| 480.00 | 510.00 | 1 | 30.00 | 10.60 | 10.80 | 10.70 | | 321.00 | |
| 510.00 | 540.00 | 1 | 30.00 | 10.80 | 9.70 | 10.25 | | 307.50 | |
| 540.00 | 570.00 | 1 | 30.00 | 10.60 | 11.60 | 11.10 | | 333.00 | |
| 570.00 | 600.00 | 1 | 30.00 | 11.60 | 11.00 | 11.30 | | 339.00 | |
| 600.00 | 630.00 | 1 | 30.00 | 11.00 | 10.80 | 10.90 | | 327.00 | |
| 630.00 | 660.00 | 1 | 30.00 | 10.80 | 10.70 | 10.75 | | 322.50 | |
| 660.00 | 690.00 | 1 | 30.00 | 10.70 | 11.00 | 10.85 | | 325.50 | |
| 690.00 | 720.00 | 1 | 30.00 | 11.00 | 10.70 | 10.85 | | 325.50 | |
| 720.00 | 750.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | | 322.50 | |

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

AE

| Chainage | | Nos | L | B | B1 | Avg B | D | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Land Mark | | | (m) | (m) | (m) | (m) | (m) | | |
| 750.00 | 780.00 | 1 | 30.00 | 10.80 | 9.00 | 9.90 | | 297.00 | |
| 780.00 | 810.00 | 1 | 30.00 | 10.20 | 9.80 | 10.00 | | 300.00 | |
| 810.00 | 840.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | | 294.00 | |
| 840.00 | 870.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | | 294.00 | |
| 870.00 | 900.00 | 1 | 30.00 | 9.80 | 9.60 | 9.70 | | 291.00 | |
| 900.00 | 930.00 | 1 | 30.00 | 9.60 | 9.80 | 9.70 | | 291.00 | |
| 930.00 | 960.00 | 1 | 30.00 | 9.80 | 11.20 | 10.50 | | 315.00 | |
| 960.00 | 990.00 | 1 | 30.00 | 11.20 | 11.20 | 11.20 | | 336.00 | |
| 990.00 | 1020.00 | 1 | 30.00 | 11.20 | 13.20 | 12.20 | | 366.00 | |
| 1020.00 | 1050.00 | 1 | 30.00 | 13.20 | 13.50 | 13.35 | | 400.50 | |
| 1050.00 | 1080.00 | 1 | 30.00 | 13.50 | 13.30 | 13.40 | | 402.00 | |
| 1080.00 | 1110.00 | 1 | 30.00 | 13.30 | 14.00 | 13.65 | | 409.50 | |
| CONTINUITY ROAD | | | | | | | | | |
| 1110.00 | 1139.00 | 1 | 29.00 | 10.80 | 9.80 | 10.30 | | 298.70 | |
| DEDUCTION | | | | | | | | | |
| E POLE | | -6 | 0.30 | 0.30 | | 0.30 | | -0.54 | |
| RAMP | | -1 | 4.20 | 0.30 | | 0.30 | | -1.26 | |
| FOOTPATH | | -1 | 8.00 | 1.80 | | 1.80 | | -14.40 | |
| MANHOLE | | -19 | 0.64 | | | | | -12.08 | |
| RAMP | | -1 | 7.00 | 0.45 | | 0.45 | | -3.15 | |
| RAMP | | -1 | 5.20 | 0.60 | | 0.60 | | -3.12 | |
| FOOTPATH | | -1 | 14.00 | 2.00 | | 2.00 | | -28.00 | |
| TREE | | -1 | 2.00 | 2.00 | | 2.00 | | -4.00 | |
| RAMP | | -1 | 4.10 | 0.80 | | 0.80 | | -3.28 | |
| LAMP POST | | -1 | 0.60 | 0.60 | | 0.60 | | -0.36 | |
| RAMP | | -1 | 7.40 | 0.60 | | 0.60 | | -4.44 | |
| RAMP | | -1 | 8.60 | 2.60 | | 2.30 | | -19.78 | |

| | | |
|---|---|---|
| **Total Qty** | **12375.09** | |
| **Total BOQ Quantity** | **27929.50** | |
| **Quantity Paid up to Fourth Part Bill** | **16043.50** | |
| **Quantity Reserved for Approval of Workslip and EIRL** | **489.09** | |
| **Qty Payable in this Bill** | **11886.00** | **SQM** |

Contractor Representative

SAPPHIRE CONSULTANTS & ENGINEERS Bangalore-59

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

### FIFTH and PART

| | |
|---|---|
| Item No: | 18 |
| Item Name: | KSRRB M500-17. Providing and laying Dense Graded Bituminous Macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with mechanical paver Gr-II (50mm to 75mm) with 4.5% VG-30 bitumen with all lead and lift and as per the direction of Engineer in-charge.I.No.-21.17.6,Pg.No.- 160 ,Data Rate |

**Final Measurement Date(s) : 22/07/2022**

| Chainage / Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **Dense Graded Bituminous** | | | | | | | | | |
| **Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main** | | | | | | | | | |
| 0.00 | 7.00 | 1 | 7.00 | 17.30 | 10.70 | 14.00 | 0.05 | 4.90 | |
| 7.00 | 30.00 | 1 | 23.00 | 10.70 | 10.50 | 10.60 | 0.05 | 12.19 | |
| 30.00 | 60.00 | 1 | 30.00 | 10.50 | 10.50 | 10.50 | 0.05 | 15.75 | |
| 60.00 | 90.00 | 1 | 30.00 | 10.50 | 10.40 | 10.45 | 0.05 | 15.68 | |
| 90.00 | 120.00 | 1 | 30.00 | 10.40 | 10.40 | 10.40 | 0.05 | 15.60 | |
| 120.00 | 150.00 | 1 | 30.00 | 10.40 | 11.10 | 10.75 | 0.05 | 16.13 | |
| 150.00 | 180.00 | 1 | 30.00 | 11.10 | 11.10 | 11.10 | 0.05 | 16.65 | |
| 180.00 | 210.00 | 1 | 30.00 | 11.10 | 11.30 | 11.20 | 0.05 | 16.80 | |
| 210.00 | 240.00 | 1 | 30.00 | 11.30 | 11.00 | 11.15 | 0.05 | 16.73 | |
| 240.00 | 270.00 | 1 | 30.00 | 11.00 | 13.00 | 12.00 | 0.05 | 18.00 | |
| 270.00 | 300.00 | 1 | 30.00 | 13.00 | 10.70 | 11.85 | 0.05 | 17.78 | |
| 300.00 | 330.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | 0.05 | 16.13 | |
| 330.00 | 360.00 | 1 | 30.00 | 10.80 | 10.30 | 10.55 | 0.05 | 15.83 | |
| 360.00 | 390.00 | 1 | 30.00 | 10.30 | 10.80 | 10.55 | 0.05 | 15.83 | |
| 390.00 | 420.00 | 1 | 30.00 | 10.80 | 10.80 | 10.80 | 0.05 | 16.20 | |
| 420.00 | 450.00 | 1 | 30.00 | 10.80 | 10.90 | 10.85 | 0.05 | 16.28 | |
| 450.00 | 480.00 | 1 | 30.00 | 10.90 | 10.60 | 10.75 | 0.05 | 16.13 | |
| 480.00 | 510.00 | 1 | 30.00 | 10.60 | 10.80 | 10.70 | 0.05 | 16.05 | |
| 510.00 | 540.00 | 1 | 30.00 | 10.80 | 9.70 | 10.25 | 0.05 | 15.38 | |
| 540.00 | 570.00 | 1 | 30.00 | 10.60 | 11.60 | 11.10 | 0.05 | 16.65 | |
| 570.00 | 600.00 | 1 | 30.00 | 11.60 | 11.00 | 11.30 | 0.05 | 16.95 | |
| 600.00 | 630.00 | 1 | 30.00 | 11.00 | 10.80 | 10.90 | 0.05 | 16.35 | |
| 630.00 | 660.00 | 1 | 30.00 | 10.80 | 10.70 | 10.75 | 0.05 | 16.13 | |
| 660.00 | 690.00 | 1 | 30.00 | 10.70 | 11.00 | 10.85 | 0.05 | 16.28 | |
| 690.00 | 720.00 | 1 | 30.00 | 11.00 | 10.70 | 10.85 | 0.05 | 16.28 | |

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

| Chainage / Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 720.00 | 750.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | 0.05 | 16.13 | |
| 750.00 | 780.00 | 1 | 30.00 | 10.80 | 9.00 | 9.90 | 0.05 | 14.85 | |
| 780.00 | 810.00 | 1 | 30.00 | 10.20 | 9.80 | 10.00 | 0.05 | 15.00 | |
| 810.00 | 840.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | 0.05 | 14.70 | |
| 840.00 | 870.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | 0.05 | 14.70 | |
| 870.00 | 900.00 | 1 | 30.00 | 9.80 | 9.60 | 9.70 | 0.05 | 14.55 | |
| 900.00 | 930.00 | 1 | 30.00 | 9.60 | 9.80 | 9.70 | 0.05 | 14.55 | |
| 930.00 | 960.00 | 1 | 30.00 | 9.80 | 11.20 | 10.50 | 0.05 | 15.75 | |
| 960.00 | 990.00 | 1 | 30.00 | 11.20 | 11.20 | 11.20 | 0.05 | 16.80 | |
| 990.00 | 1020.00 | 1 | 30.00 | 11.20 | 13.20 | 12.20 | 0.05 | 18.30 | |
| 1020.00 | 1050.00 | 1 | 30.00 | 13.20 | 13.50 | 13.35 | 0.05 | 20.03 | |
| 1050.00 | 1080.00 | 1 | 30.00 | 13.50 | 13.30 | 13.40 | 0.05 | 20.10 | |
| 1080.00 | 1110.00 | 1 | 30.00 | 13.30 | 14.00 | 13.65 | 0.05 | 20.48 | |
| CONTINUITY ROAD | | | | | | | | | |
| 1110.00 | 1139.00 | 1 | 29.00 | 10.80 | 9.80 | 10.30 | 0.05 | 14.94 | |
| DEDUCTION | | | | | | | | | |
| E POLE | | -6 | 0.30 | 0.30 | | 0.30 | 0.05 | -0.03 | |
| RAMP | | -1 | 4.20 | 0.30 | | 0.30 | 0.05 | -0.06 | |
| FOOTPATH | | -1 | 8.00 | 1.80 | | 1.80 | 0.05 | -0.72 | |
| MANHOLE | | -19 | 0.64 | | | | 0.05 | -0.60 | |
| RAMP | | -1 | 7.00 | 0.45 | | 0.45 | 0.05 | -0.16 | |
| RAMP | | -1 | 5.20 | 0.60 | | 0.60 | 0.05 | -0.16 | |
| FOOTPATH | | -1 | 14.00 | 2.00 | | 2.00 | 0.05 | -1.40 | |
| TREE | | -1 | 2.00 | 2.00 | | 2.00 | 0.05 | -0.20 | |
| RAMP | | -1 | 4.10 | 0.80 | | 0.80 | 0.05 | -0.16 | |
| LAMP POST | | -1 | 0.60 | 0.60 | | 0.60 | 0.05 | -0.02 | |
| RAMP | | -1 | 7.40 | 0.60 | | 0.60 | 0.05 | -0.22 | |
| RAMP | | -1 | 8.60 | 2.60 | | 2.30 | 0.05 | -0.99 | |

| | | |
|---|---|---|
| **Total Qty** | **618.75** | |
| **Total BOQ Quantity** | **1396.48** | |
| **Quantity Paid up to Fourth Part Bill** | **802.17** | |
| **Quantity Reserved for Approval of Workslip and EIRL** | **24.44** | |
| **Qty Payable in this Bill** | **594.31** | **CUM** |

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

## FIFTH and PART

| | |
|---|---|
| Item No: | 19 |
| Item Name: | Providing and laying Bituminous concrete , using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision - using 40-60 TPH capacity HMP with mechanical paver grading II (30-40mm) with 5.4% of VG-30 bitumen .Page no-162 It. No -21.22.6 |

**Final Measurement Date(s) : 23/07/2022**

| Chainage / Land Mark | | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **Bituminous concrete** | | | | | | | | | |
| **Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main** | | | | | | | | | |
| 0.00 | 7.00 | 1 | 7.00 | 17.30 | 10.70 | 14.00 | 0.04 | 3.92 | |
| 7.00 | 30.00 | 1 | 23.00 | 10.70 | 10.50 | 10.60 | 0.04 | 9.75 | |
| 30.00 | 60.00 | 1 | 30.00 | 10.50 | 10.50 | 10.50 | 0.04 | 12.60 | |
| 60.00 | 90.00 | 1 | 30.00 | 10.50 | 10.40 | 10.45 | 0.04 | 12.54 | |
| 90.00 | 120.00 | 1 | 30.00 | 10.40 | 10.40 | 10.40 | 0.04 | 12.48 | |
| 120.00 | 150.00 | 1 | 30.00 | 10.40 | 11.10 | 10.75 | 0.04 | 12.90 | |
| 150.00 | 180.00 | 1 | 30.00 | 11.10 | 11.10 | 11.10 | 0.04 | 13.32 | |
| 180.00 | 210.00 | 1 | 30.00 | 11.10 | 11.30 | 11.20 | 0.04 | 13.44 | |
| 210.00 | 240.00 | 1 | 30.00 | 11.30 | 11.00 | 11.15 | 0.04 | 13.38 | |
| 240.00 | 270.00 | 1 | 30.00 | 11.00 | 13.00 | 12.00 | 0.04 | 14.40 | |
| 270.00 | 300.00 | 1 | 30.00 | 13.00 | 10.70 | 11.85 | 0.04 | 14.22 | |
| 300.00 | 330.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | 0.04 | 12.90 | |
| 330.00 | 360.00 | 1 | 30.00 | 10.80 | 10.30 | 10.55 | 0.04 | 12.66 | |
| 360.00 | 390.00 | 1 | 30.00 | 10.30 | 10.80 | 10.55 | 0.04 | 12.66 | |
| 390.00 | 420.00 | 1 | 30.00 | 10.80 | 10.80 | 10.80 | 0.04 | 12.96 | |
| 420.00 | 450.00 | 1 | 30.00 | 10.80 | 10.90 | 10.85 | 0.04 | 13.02 | |
| 450.00 | 480.00 | 1 | 30.00 | 10.90 | 10.60 | 10.75 | 0.04 | 12.90 | |
| 480.00 | 510.00 | 1 | 30.00 | 10.60 | 10.80 | 10.70 | 0.04 | 12.84 | |
| 510.00 | 540.00 | 1 | 30.00 | 10.80 | 9.70 | 10.25 | 0.04 | 12.30 | |
| 540.00 | 570.00 | 1 | 30.00 | 10.60 | 11.60 | 11.10 | 0.04 | 13.32 | |
| 570.00 | 600.00 | 1 | 30.00 | 11.60 | 11.00 | 11.30 | 0.04 | 13.56 | |
| 600.00 | 630.00 | 1 | 30.00 | 11.00 | 10.80 | 10.90 | 0.04 | 13.08 | |
| 630.00 | 660.00 | 1 | 30.00 | 10.80 | 10.70 | 10.75 | 0.04 | 12.90 | |
| 660.00 | 690.00 | 1 | 30.00 | 10.70 | 11.00 | 10.85 | 0.04 | 13.02 | |
| 690.00 | 720.00 | 1 | 30.00 | 11.00 | 10.70 | 10.85 | 0.04 | 13.02 | |
| 720.00 | 750.00 | 1 | 30.00 | 10.70 | 10.80 | 10.75 | 0.04 | 12.90 | |

Executive Engineer, Yelahanka, Division

SAFIENCE CONSULTANTS & ENGINEERS Bangalore-59

AE

| Chainage | | Nos | L | B | B1 | Avg B | D | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Land Mark | | | (m) | (m) | (m) | (m) | (m) | | |
| 750.00 | 780.00 | 1 | 30.00 | 10.80 | 9.00 | 9.90 | 0.04 | 11.88 | |
| 780.00 | 810.00 | 1 | 30.00 | 10.20 | 9.80 | 10.00 | 0.04 | 12.00 | |
| 810.00 | 840.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | 0.04 | 11.76 | |
| 840.00 | 870.00 | 1 | 30.00 | 9.80 | 9.80 | 9.80 | 0.04 | 11.76 | |
| 870.00 | 900.00 | 1 | 30.00 | 9.80 | 9.60 | 9.70 | 0.04 | 11.64 | |
| 900.00 | 930.00 | 1 | 30.00 | 9.60 | 9.80 | 9.70 | 0.04 | 11.64 | |
| 930.00 | 960.00 | 1 | 30.00 | 9.80 | 11.20 | 10.50 | 0.04 | 12.60 | |
| 960.00 | 990.00 | 1 | 30.00 | 11.20 | 11.20 | 11.20 | 0.04 | 13.44 | |
| 990.00 | 1020.00 | 1 | 30.00 | 11.20 | 13.20 | 12.20 | 0.04 | 14.64 | |
| 1020.00 | 1050.00 | 1 | 30.00 | 13.20 | 13.50 | 13.35 | 0.04 | 16.02 | |
| 1050.00 | 1080.00 | 1 | 30.00 | 13.50 | 13.30 | 13.40 | 0.04 | 16.08 | |
| 1080.00 | 1110.00 | 1 | 30.00 | 13.30 | 14.00 | 13.65 | 0.04 | 16.38 | |
| CONTINUITY ROAD | | | | | | | | | |
| 1110.00 | 1139.00 | 1 | 29.00 | 10.80 | 9.80 | 10.30 | 0.04 | 11.95 | |
| DEDUCTION | | | | | | | | | |
| E POLE | | -6 | 0.30 | 0.30 | | 0.30 | 0.04 | -0.02 | |
| RAMP | | -1 | 4.20 | 0.30 | | 0.30 | 0.04 | -0.05 | |
| FOOTPATH | | -1 | 8.00 | 1.80 | | 1.80 | 0.04 | -0.58 | |
| MANHOLE | | -19 | 0.64 | | | | 0.04 | -0.48 | |
| RAMP | | -1 | 7.00 | 0.45 | | 0.45 | 0.04 | -0.13 | |
| RAMP | | -1 | 5.20 | 0.60 | | 0.60 | 0.04 | -0.12 | |
| FOOTPATH | | -1 | 14.00 | 2.00 | | 2.00 | 0.04 | -1.12 | |
| TREE | | -1 | 2.00 | 2.00 | | 2.00 | 0.04 | -0.16 | |
| RAMP | | -1 | 4.10 | 0.80 | | 0.80 | 0.04 | -0.13 | |
| LAMP POST | | -1 | 0.60 | 0.60 | | 0.60 | 0.04 | -0.01 | |
| RAMP | | -1 | 7.40 | 0.60 | | 0.60 | 0.04 | -0.18 | |
| RAMP | | -1 | 8.60 | 2.60 | | 2.30 | 0.04 | -0.79 | |
| | | | | | | | Total Qty | 495.00 | |
| | | | | | | | Total BOQ Quantity | 1052.24 | |
| | | | | | | | Quantity Paid up to Fourth Part Bill | 641.74 | |
| | | | | | | | Quantity Reserved for Approval of Workslip and EIRL | 84.50 | |
| | | | | | | | Qty Payable in this Bill | 410.50 | CUM |

Contractor Representative

Consultant's Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

### FIFTH and PART

| | |
|---|---|
| Item No: | 20 |
| Item Name: | KSRRB M800-13. Road Marking with Hot Applied 'Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface / Concrete Surface :- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications .MoRTH Specifications No.803(Pg.No-182,I.No.24.15) |

**Final Measurement Date(s) : 25/07/2022**

| Chainage / Land Mark | Nos | L (m) | B (m) | B1 (m) | Avg B (m) | D (m) | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|
| **ROAD MARKING - Shoulders** | | | | | | | | |
| **Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main** | | | | | | | | |
| 0.00 | 7.00 | 2 | 7.00 | | | | | Approach |
| 7.00 | 30.00 | 2 | 23.00 | | | 0.15 | 6.90 | |
| 30.00 | 60.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 60.00 | 90.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 90.00 | 120.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 120.00 | 150.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 150.00 | 180.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 180.00 | 210.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 210.00 | 240.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 240.00 | 270.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 270.00 | 300.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 300.00 | 330.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 330.00 | 360.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 360.00 | 390.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 390.00 | 420.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 420.00 | 450.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 450.00 | 480.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 480.00 | 510.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 510.00 | 540.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 540.00 | 570.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 570.00 | 600.00 | 2 | 30.00 | | | 0.15 | 9.00 | |
| 600.00 | 630.00 | 2 | 30.00 | | | 0.15 | 9.00 | |

AE

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

| Chainage | | Nos | L | B | B1 | Avg B | D | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Land Mark | | | (m) | (m) | (m) | (m) | (m) | | |
| 630.00 | 660.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 660.00 | 690.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 690.00 | 720.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 720.00 | 750.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 750.00 | 780.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 780.00 | 810.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 810.00 | 840.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 840.00 | 870.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 870.00 | 900.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 900.00 | 930.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 930.00 | 960.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 960.00 | 990.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 990.00 | 1020.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 1020.00 | 1050.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 1050.00 | 1080.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| 1080.00 | 1110.00 | 2 | 30.00 | | | 0.15 | | 9.00 | |
| CONTINUITY ROAD | | | | | | | | | |
| 1110.00 | 1139.00 | 2 | 29.00 | | | 0.15 | | 8.70 | |
| ROAD MARKING - Center | | | | | | | | | |
| 0.00 | 7.00 | 0.5 | 7.00 | | | | | | |
| 7.00 | 30.00 | 0.5 | 23.00 | | | 0.10 | | 1.15 | Approach |
| 30.00 | 60.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 60.00 | 90.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 90.00 | 120.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 120.00 | 150.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 150.00 | 180.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 180.00 | 210.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 210.00 | 240.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 240.00 | 270.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 270.00 | 300.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 300.00 | 330.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 330.00 | 360.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 360.00 | 390.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 390.00 | 420.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 420.00 | 450.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 450.00 | 480.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 480.00 | 510.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 510.00 | 540.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 540.00 | 570.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 570.00 | 600.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |

| Chainage | | Nos | L | B | B1 | Avg B | D | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Land Mark | | | (m) | (m) | (m) | (m) | (m) | | |
| 600.00 | 630.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 630.00 | 660.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 660.00 | 690.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 690.00 | 720.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 720.00 | 750.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 750.00 | 780.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 780.00 | 810.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 810.00 | 840.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 840.00 | 870.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 870.00 | 900.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 900.00 | 930.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 930.00 | 960.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 960.00 | 990.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 990.00 | 1020.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 1020.00 | 1050.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 1050.00 | 1080.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| 1080.00 | 1110.00 | 0.5 | 30.00 | | | 0.10 | | 1.50 | |
| CONTINUITY ROAD | | | | | | | | | |
| 1110.00 | 1139.00 | 0.5 | 29.00 | | | 0.10 | | 1.45 | |
| | | | | | | | Total Qty | 396.20 | |
| | | | | | | | Qty Payable in this Bill | 396.20 | SQM |

Approach

Contractor Representative

SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP

# BRUHAT BANGALORE MAHANAGARA PALIKE

**NAME OF WORK:-** Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

## Measurement Sheet

**FIFTH and PART**

| | |
|---|---|
| Item No: | 21 |
| Item Name: | KSRRB M800-35. Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer (Page No.187. Item No.24.41), SOR 2018-19 |

**Final Measurement Date(s) : 25/07/2022**

| Chainage | | Nos | L | B | B1 | Avg B | D | Qty | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| Land Mark | | | (m) | (m) | (m) | (m) | (m) | | |
| **Self Financed Society 407 Colony, Road from Yelahanka (Major Unni Krishan) Road to 6th Main** | | | | | | | | | |
| 0.00 | 1110.00 | 2 | 1110.00 | (2 X LENGTH/6) | | | | 370.00 | |
| | | | | | | | **Total Qty** | **370.00** | |
| | | | | | | | **Qty Payable in this Bill** | **370.00** | **NO'S** |

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP